MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT (TRD)

Permitting and Compliance Division
1520 E. Sixth Avenue
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Bitter Creek Pipelines, LLC
Symons Central Compressor Station
P.O. Box 131
Glendive, MT 59330

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		Semiannual
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		As Applicable
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 Preconstruction Permitting	X		Permit #3250-02
New Source Performance Standards (NSPS)		X	
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except for 40 CFR 61, Subpart M
Maximum Achievable Control Technology (MACT)		X	
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR		X	
Prevention of Significant Deterioration (PSD)		X	
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		General SIP

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SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the U.S. Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit, and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the original application submitted by Bitter Creek Pipelines, LLC (BCPL) on April 4, 2003, and an additional submittal on May 6, 2003.

B. Facility Location

BCPL owns and operates the Symons Central Compressor Station located approximately 3 miles southeast of Decker, Montana, in Sections 34 and 35, Township 9 South, Range 40 East, in Big Horn County, Montana.

C. Facility Background Information

Montana Air Quality Permit Background

On April 4, 2003, BCPL submitted, concurrently, an application for a Montana Air Quality Permit and a Title V Operating Permit for the Symons Central Compressor Station. The Montana Air Quality Permit Application was deemed complete on May 9, 2003, upon the submittal of additional information by BCPL. Montana Air Quality Permit **#3250-00** was issued final on July 16, 2003.

On December 5, 2003, BCPL requested an administrative amendment to Montana Air Quality Permit #3250-00. BCPL requested to add a 0.75 million British thermal units per hour (MMBtu/hr) Cimarron 3 coil evaporator unit. The unit was added to the permit according to the provisions of ARM 17.8.745. Montana Air Quality Permit **#3250-01** was issued final on January 8, 2004.

Title V Operating Permit

On April 4, 2003, BCPL submitted, concurrently, an application for a Montana Air Quality Permit and a Title V Operating Permit for the Symons Central Compressor Station. The Title V Operating Permit Application was deemed administratively complete on April 5, 2003, and technically complete on May 9, 2003, upon the submittal of additional information by BCPL. The Cimarron 3 coil evaporator unit that was added to the permit analysis of Montana Air Quality Permit #3250-01 was added to the insignificant emitting unit list contained in Appendix A of the Proposed version of the Title V Operating Permit **#OP3250-00**. In addition, alternate operating scenarios were added to Sections III.B and III.C to allow BCPL to replace engines according to the provisions of ARM 17.8.745 and ARM 17.8.1215.

D. Current Permit Action

On April 27, 2005, the Montana Department of Environmental Quality (Department) received a request from WBI Holdings, Inc., on behalf of BCPL to write the permit in a de minimis friendly manner. The facility, located near Decker, Montana, would be allowed to operate up to six natural gas compressor engines of up to 1,680 horsepower (hp) and two natural gas compressor engines of up to 840 hp, all utilizing “rich-burn” technology with a NSCR unit with an AFR controller. On July 7, 2005, Preconstruction Permit #3250-02 was issued final to BCPL and allowed BCPL to operate the facility, as requested. Subsequently, Operating Permit #OP3250-01 is being updated to reflect the changes in Permit #3250-02.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 105, MCA, the Department has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications. The checklist was completed on July 18, 2005.

G. Compliance Designation

The Department has not yet inspected the facility for compliance with Montana Air Quality Permit #3250-00. The facility is currently comprised of four natural gas compressor engines of 1,680-Hp or less. Testing was conducted for NO_x and CO for units #1 and #2 on January 28, 2004; and unit #4 on April 28, 2005. Unit #3 has not yet been installed.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

The BCPL Symons Central Compressor Station Facility is a coal bed methane, natural gas central compressor station. Coal bed methane is a natural hydrocarbon gas, primarily methane that occurs in beds of coal. Production field facilities withdraw the methane from the coal beds and send the methane to the Symons Central Compressor Station Facility to be dehydrated and compressed for transmission through the natural gas pipeline. The two glycol dehydration units are used to remove moisture from the gas and the eight compressor engines are used to boost pipeline pressure for transmitting the natural gas through the pipeline. The Symons Central Compressor Station Facility is not a production field facility; the station simply dehydrates and compresses natural gas that is received from surrounding production field facilities.

B. Emission Units and Pollution Control Device Identification

The emission units regulated by Permit #OP3250-01 and the pollution control device utilized by each emission unit are summarized in the following table:

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	1,680-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU002	1,680-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU003	1,680-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU004	1,680-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU005	1,680-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU006	1,680-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU007	840-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller
EU008	840-Hp or Less Natural Gas Compressor Engine	NSCR Unit and AFR Controller

C. Categorically Insignificant Sources/Activities

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emissions unit as one that emits less than 5 tons per year of any regulated air pollutant, has the potential to emit less than 500 pounds per year of lead or any Hazardous Air Pollutant (HAP), and is not regulated by any applicable requirement other than a generally applicable requirement. The list of insignificant emitting units at the BCPL Symons Central Compressor Station are summarized in the following table:

Emissions Unit ID	Description
IEU01	1 MMBtu/hr Dehydration Unit #1
IEU02	1 MMBtu/hr Dehydration Unit #2
IEU03	(8) 50-Gallon Engine Jacket Water (EG/water) Tanks
IEU04	(8) 500-Gallon Ethylene Glycol (EG/water makeup) Tanks
IEU05	(8) 120-Gallon Compressor Crankcase Oil Tanks
IEU06	(8) 230-Gallon Engine Crankcase Oil Tanks
IEU07	(8) 350-Gallon Compressor Lubricator Oil Tanks
IEU08	(8) 500-Gallon Waste Oil Tanks
IEU10	(2) 1000-Gallon Triethylene Glycol Tanks
IEU11	(1) 400-Barrel Produced Water Tank
IEU12	(1) 400-Barrel Water/Oil Mix Holding Tank
IEU13	(1) 400-Barrel (Processed) Water Tank
IEU14	(1) 500,000 Btu/hr Produced Water Tank Heater
IEU15	(1) 500,000 Btu/hr Water/Oil Mix Holding Tank Heater
IEU16	(1) 500,000 Btu/hr (Processed) Water Tank Heater
IEU17	(1) 0.75 MM Btu/hr Cimarron 3 Coil Evaporator Unit

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

Each of the six 1,680-Horsepower (Hp) or less natural gas compressor engines (EU001, EU002, EU003, EU004, EU005, and EU006) is limited to NO_x limit (lb/hr) = 1.0 g/bhp-hr * bhp * 0.002205 lb/g; CO limit (lb/hr) = 2.0 g/bhp-hr * bhp * 0.002205 lb/g; and, VOC limit (lb/hr) = 0.5 g/bhp-hr * bhp * 0.002205 lb/g. The emission limits are based on Best Available Control Technology (BACT) determinations that were established by the Department. Emissions from each engine are required to be controlled by a non-selective catalytic reduction (NSCR) unit and an air to fuel ratio (AFR) controller. In addition, emissions from each of the engines are limited to 20% opacity averaged over six consecutive minutes and particulate matter caused by the combustion of fuel is limited to $E=1.026*H^{-0.233}$. Further, fuel burned in the engines must not contain sulfur compounds in excess of 50 grains per 100 standard cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.

Each of the two 840-Hp compressor or less natural gas compressor engines (EU007 and EU008) is limited to NO_x limit (lb/hr) = 1.0 g/bhp-hr * bhp * 0.002205 lb/g; CO limit (lb/hr) = 2.0 g/bhp-hr * bhp * 0.002205 lb/g; and, VOC limit (lb/hr) = 1.0 g/bhp-hr * bhp * 0.002205 lb/g. The emission limits are based on BACT determinations that were established by the Department. Emissions from each engine are required to be controlled by a NSCR unit and an AFR controller. In addition, emissions from each engine are limited to 20% opacity averaged over six consecutive minutes and particulate matter caused by the combustion of fuel is limited to $E = 1.026 * H^{-0.233}$. Further, fuel burned in the engines must not contain sulfur compounds in excess of 50 grains per 100 standard cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor for all emission units. Furthermore, the permit does not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for a insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo **(i.e., no monitoring)** will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

C. Test Methods and Procedures

Montana Air Quality Permit #3250-01 requires BCPL to test each of the six 1,680-Hp or less natural gas compressor engines and each of the two compressor engines equal to, or less than 800-Hp, for NO_x and CO, concurrently, to demonstrate compliance with the emission limitations in the permit. The permit requires that the tests be performed according to the EPA methods in Appendix A of 40 CFR 60. Compliance with the opacity, particulate from fuel combustion, sulfur compounds in fuel (gaseous), and VOC limitations in the permit may be demonstrated by burning pipeline quality natural gas (as defined by BCPL's long-haul pipeline contracts) on an ongoing basis.

Title V Operating Permit #OP3250-01 contains requirements for semiannual testing with a portable analyzer for each of the six 1,680-Hp or less natural gas compressor engines and each of the two compressor engines equal to, or less than 800-Hp. In addition, Permit #OP3250-01 requires a testing with a portable analyzer for each engine that is replaced according to the provisions of ARM 17.8.745 and ARM 17.8.1215. The permit stipulates that the portable analyzer shall be capable of achieving performance specifications equivalent to the traditional test methods in 40 CFR 60, Appendix A or shall be capable of meeting the requirements of EPA Conditional Test Method 030 for the "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers." BCPL may use another testing procedure as approved in advance by the Department. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). BCPL will then convert the NO_x and CO emissions test results from a "ppm" value to a "lb/hr" number. Stack gas flow rates shall be determined using EPA Test Methods in 40 CFR 60, Appendix A in order to monitor compliance with the emissions limitations in the permit.

The Department will use the portable analyzer testing results as a direct measure of compliance. The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the BCPL may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

BCPL is required to keep all records listed in the operating permit as a permanent business record for at least five years following the date of the generation of the record.

E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit and Section V of the operating permit "General Conditions" explains the reporting requirements. However, BCPL is required to submit semi-annual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

F. Public Notice

BCPL was not required to submit a public notice for the current permit action because the change is considered administrative.

Summary of Public Comments

G. Permit Comments (Permit OP3250-01)

Because the permit action is an administrative amendment, with no increase in facility emissions, the Department is not required to provide any corresponding notice to the public or affected states before issuing the Department decision.

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

BCPL requested a permit shield from all requirements that were identified as non-applicable in its initial permit application. Section IV of Permit #OP3250-01 "Non-Applicable Requirements" contains the requirements that the Department determined were non-applicable. The following table summarizes the requirements that BCPL identified as non-applicable and contains the reasons that the Department did not include these requirements as non-applicable in the permit.

Applicable Requirement	Reason Not Included in Permit
ARM 17.8.204 - Ambient Air Monitoring ARM 17.8.206 – Methods and Data ARM 17.8.223 – Ambient Air Quality Standard for PM_{10}	Because these rules are always applicable to a major source and they may contain specific requirements for compliance, BCPL will not be shielded from these regulations.
ARM 17.8.801 *et seq.* – Prevention of Significant Deterioration of Air Quality ARM 17.8.1101 *et seq.* – Visibility Impact Assessment	Because these rules are either (1) rules that do not have specific requirements for major sources because they are requirements for EPA or state and local authorities and should never be shielded, (2) procedural rules that have specific requirements that may become relevant to BCPL during the permit term or (3) these rules are rules that consist of either a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference, BCPL will not be shielded from these rules.
ARM 17.8.901 *et seq.* – Permit Requirements for Major Stationary Sources or Major Modifications Locating Within Nonattainment Areas ARM 17.8.1001 *et seq.* – Preconstruction Permit Requirements for Major Stationary Sources or Major Modifications Locating Within Attainment or Unclassified Areas	Because these rules are either (1) procedural rules that have specific requirements that may become relevant to BCPL during the permit term or (2) these rules are rules that consist of either a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference, BCPL will not be shielded from these rules.
40 CFR Part 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	Because 40 CFR Part 63, Subpart HHH is a federal regulation that could become relevant to BCPL during the permit term, BCPL will not be shielded from this regulation.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT/NESHAP Standards

National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities (40 CFR Part 63, Subpart HH) and National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities (40 CFR Part 63, Subpart HHH) were promulgated June 17, 1999. As of the issuance date of Permit #OP3250-01, Subpart HHH does not apply to the Symons Central Compressor Station because the facility is not a major source of HAPs. Subpart HH does not apply to the Symons Central Compressor Station because the facility is not a major source of HAPs and because the facility is considered a natural gas transmission and storage facility, not a natural gas production facility.

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ) became effective on August 16, 2004. Subpart ZZZZ, does not apply to the Symons Central Compressor Station because the facility is not a major source of HAPs.

National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) was proposed by the EPA on January 13, 2003. The compliance date for Subpart DDDDD for existing sources is September 13, 2007. However, existing sources must submit their compliance demonstrations under appendix A by September 13, 2006. Subpart DDDDD, as proposed, would not apply to the Symons Central Compressor Station because the facility is not a major source of HAPs.

B. NSPS Standards

As of the issuance date of Permit #3250-01, the Department is unaware of any future NSPS standards that may be promulgated that will affect the Symons Central Compressor Station.

C. Risk Management Plan

As of this date (08/22/05), this facility does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68.130 requirements by June 21, 1999; three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.